The Isotope Explorer

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The Isotope Explorer (formerly VuENSDF) is a Windows C++application for searching and displaying the Evaluated Nuclear Structure Data File (ENSDF) and the Nuclear Science Reference file (NSR). The data can be downloaded by the Isotope Explorer from the Internet or from the *Table of Isotopes* CD-ROM. Data can be selected by level or transition properties, nuclear structure information, and transition coincidence relationships. The nuclear chart can be used to display selected nuclear properties, generate functional relationships between data, and display data from the nuclear databases. The database can be searched by restricting the range of nuclear properties, and the results can be displayed on the chart or in tables, level scheme drawings, and plots. Keyword abstracts for over 140,000 references can be retrieved and displayed.

Version 1.0 of VuENSDF was released in 1996, and Version 2.0 of the Isotope Explorer is available for beta testing. Both versions are freely distributed and can be downloaded from the WWW home page at http://isotopes.lbl.gov/isotopes/vuensdf.html. Sample windows for the isotope explorer are shown in figure 1 below.
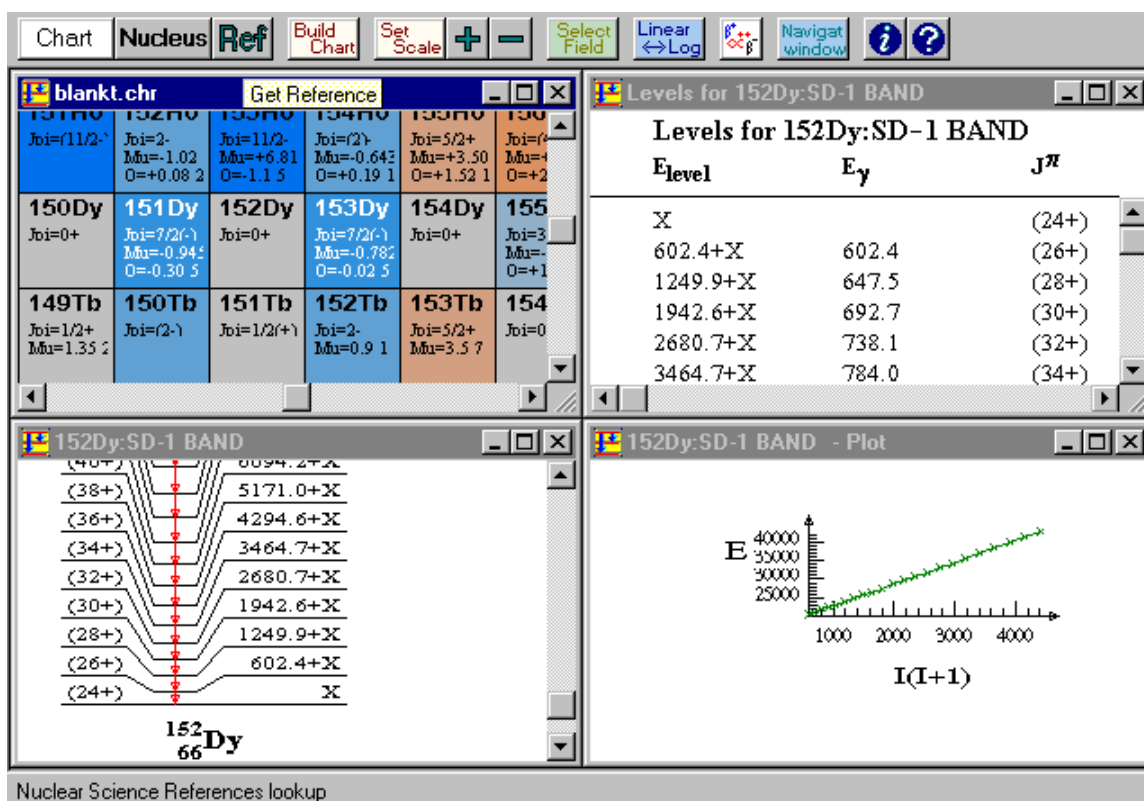

Figure 1. Representative chart, table, level scheme, and plot for a ^{152}Dy superdeformed band.

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